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STATEMENT OF ROBERT J. HALSTEAD ON BEHALF OF THE STATE OF NEVADA AGENCY FOR NUCLEAR PROJECTS REGARDING U.S. DEPARTMENT OF ENERGY'S DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR A GEOLOGIC REPOSITORY FOR THE DISPOSAL OF SPENT NUCLEAR FUEL AND HIGH-LEVEL RADIOACTIVE WASTE AT YUCCA MOUNTAIN, NEVADA

PRESENTED AT THE PUBLIC HEARING IN ATLANTA, GEORGIA OCTOBER 21, 1999

The National Environmental Policy Act (NEPA) process is the primary entree the public has to participate in federal decision-making on actions that may or will significantly affect the environment, including the human environment. The NEPA procedures are designed to "*insure that environmental information* [including information on the human environment as well as public health and safety] *is available to public officials and citizens before decisions are made and before actions are taken.*" The purpose of these NEPA regulations is to assure that federal agencies respond according to the letter and spirit of the Act.

The Nuclear Waste Policy Act of 1982, as amended, requires that the U.S. Department of Energy (DOE) issue an Environmental Impact Statement (EIS) to accompany the recommendation by the Secretary of Energy to the President that the country go forward with development of a high-level nuclear waste repository at Yucca Mountain, if such a recommendation is made. That EIS must also clearly identify and assess the impacts associated with the transportation of highly radioactive materials from around the country to Yucca Mountain.

In order for people to participate in the NEPA process, they must be afforded the
1 opportunity to know that a major federal action has the potential to impact them and their communities. Not only does the draft EIS that is the subject of this hearing not identify rail and highway routes for cross country shipments of spent nuclear fuel and high-level radioactive waste, but DOE has also, in violation of NEPA, failed to inform people of the locations of likely shipping routes and the attendant risks and impacts of such transportation for their communities.

6 For example, the notices for this public hearing does NOT indicate that people in Atlanta and the South stand to be significantly impacted by radioactive materials shipments as a result of the Yucca Mountain program. One can only conclude that such an oversight is intentional and designed to suppress public interest in the project and participation in the public hearings.

2... The draft EIS (DEIS) itself is substantively and legally deficient in its treatment (or lack of treatment) of key transportation issues that have both national and regional significance. The DEIS fails to evaluate the most likely, and potentially heaviest impact, modal mix (i.e., rail/truck/barge) scenario for civilian SNF shipments. The DEIS instead uses a bounding scenario approach, comparing a hypothetical mostly truck scenario with a hypothetical mostly rail scenario.

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2 cont. The DEIS approach might be appropriate for a generic national transportation impact assessment, but it is not sufficient for a site-specific transportation impact analysis under NEPA.

7 The DEIS mostly rail scenario significantly misrepresents the extent to which legal-weight truck (LWT) shipments to the repository can be reduced by unrealistically assuming major investments at reactor sites and unprecedented use of heavy haul truck (HHT) and barge transport. Moreover, the DEIS implies that all scenarios are equally probable. The draft report fails to identify the most likely modal mix in conjunction with the most likely highway and rail routes.

3 Nevada believes that the final EIS must evaluate a third transportation scenario based on the current transportation capabilities of reactor and storage sites. Planning Information Corporation (PIC) developed a current capabilities transportation scenario for the State of Nevada in September, 1996. Under this scenario, PIC assumed that neither utilities nor DOE transportation contractors would make major investments to upgrade cask loading capabilities or near-site infrastructure at reactor facilities that are currently unable to load rail casks or that currently lack direct rail access. Further, PIC assumed reactor sites without direct rail access would not utilize HHT or barge shipment options.

Under the PIC current capabilities scenario, 32 reactor and storage sites in 19 states ship civilian spent nuclear fuel (SNF) to the repository by legal-weight truck. These 32 sites account for about 35 percent of the total civilian SNF inventory shipped to the repository. When the PIC current capabilities scenario is combined with the reactor shipment numbers assumed in the DEIS, and when all truck shipments are assumed to use General Atomics GA-4/9 casks (as DOE does), the resulting modal estimates for DOE's proposed action (70,000 metric tons of spent fuel shipped to Yucca Mountain) are 16,258 LWT shipments over 24 years (677 per year) and 7,355 rail shipments (306 per year).

For DOE's Module 1 scenario (assuming all existing commercial spent fuel plus all DOE-owned spent fuel and high-level waste are shipped to the repository), there are 24,958 LWT shipments over 39 years (640 per year) and 13,858 rail shipments (355 per year). For DOE's Module 2 scenario (assuming all commercial and DOE-owned spent fuel and high-level waste plus Greater than Class C and Special Performance Assessment wastes are shipped to Yucca Mountain), there are 24,958 LWT shipments over 39 years (640 per year) and 14,544 rail shipments (373 per year).

PIC combined the current capabilities modal assumptions with the most likely highway and rail routes, using the same HIGHWAY and INTERLINE computer models employed by DOE. PIC developed a more meaningful bounding approach than the DEIS to the geographic distribution of transportation impacts by mapping two different applications of the modeling results. These maps are submitted for the record as Attachments #1 and #2.

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4 As noted above, the draft EIS fails to identify the cross-country rail and truck routes used in DOE'S transportation impact analysis. DOE contractors who prepared the DEIS actually selected specific routes for analysis using the HIGHWAY and INTERLINE models. A DEIS reference [TRW, Environmental Baseline File for National Transportation, with Data Files (June, 1999), Chapter 4] even describes the procedures followed. However, DOE decided not to reveal the actual highway and rail routes used in the DEIS, and the TRW reference does not provide a written summary or maps of the information provided to DOE on computer files.

Nevada believes that DOE has violated NEPA by concealing crucial information used in the DEIS. Absent this information, persons affected by the transportation impacts of the proposed action have no way of determining the legal sufficiency of DOE's analysis. Moreover, DOE's attempted concealment of the shipment routes is a deviation from DOE's past practice of identifying the most likely transportation routes in NEPA documents, such as the Waste Isolation Pilot Plant (WIPP) EIS and Supplemental EIS. This action can only diminish public confidence in DOE's ability to safely transport these highly radioactive materials.

The State of Nevada has sponsored a number of routing studies over the past decade using the same computer models as DOE's consultants. These studies indicate that if Nevada does not designate preferred alternative routes and DOE shipping contractors follow the quickest routes consistent with federal regulations, the primary east-west highway corridors would be I-80 from Ohio to Utah, I-70 from Pennsylvania to Utah, and I-15 from Utah to Nevada.

The most likely alternative east-west highway corridors would be I-44 from Missouri to Oklahoma, I-40 from Tennessee to California, and I-15 from California to Nevada. The primary east-west rail corridors would be the Union Pacific mainlines out of Chicago and Kansas City, converging in Gibbon, Nebraska, and continuing west through Cheyenne and Salt Lake City to Nevada. The most likely alternative east-west rail corridor would be the Santa Fe-Burlington Northern line from Kansas City to San Bernardino, connecting with the Union Pacific from San Bernardino to Nevada.

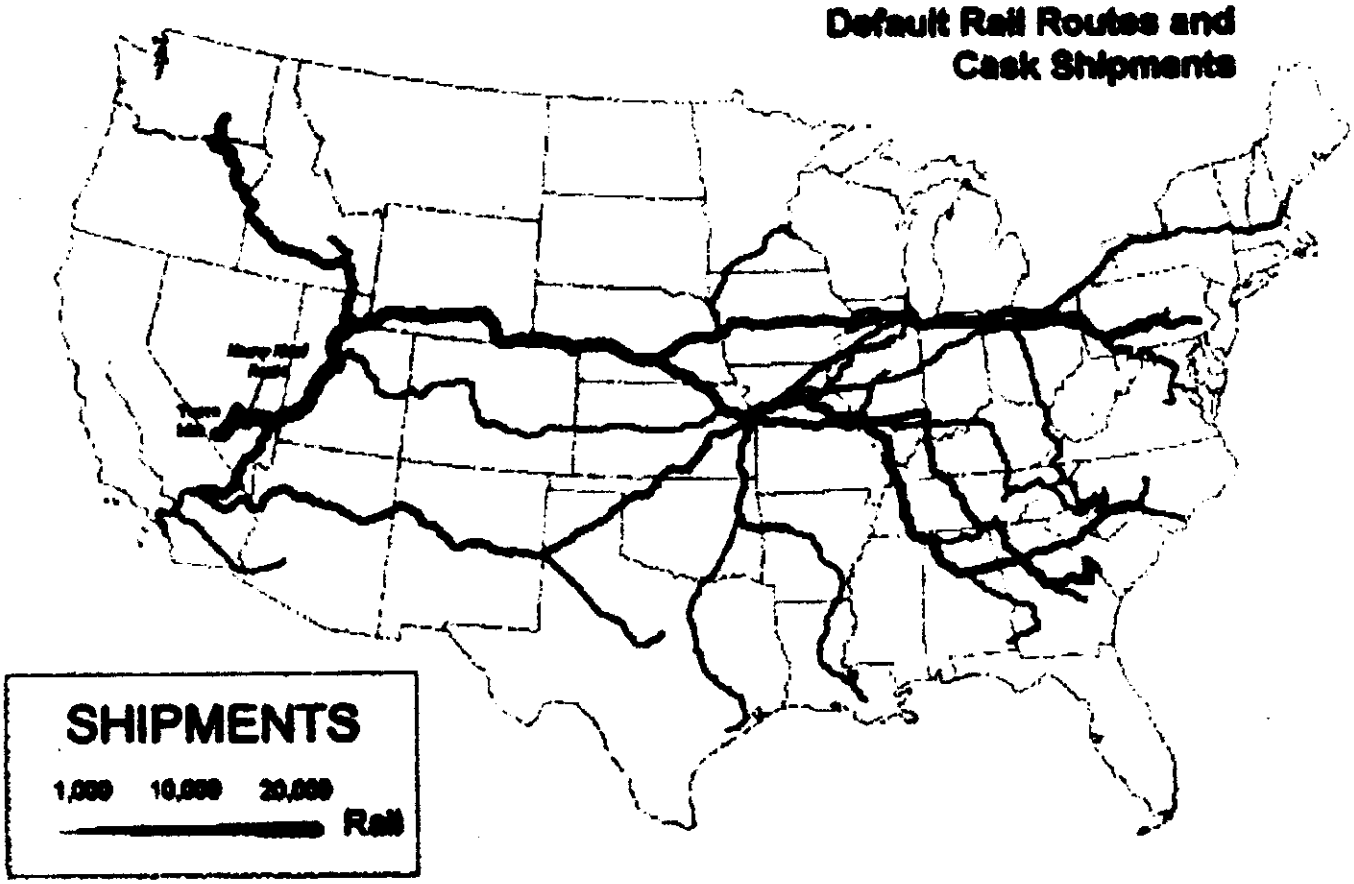
5 The Draft EIS also fails to provide any meaningful analysis of the regional impacts of rail and truck transportation to Yucca Mountain. For example, the DEIS provides no route-specific information on the impacts of truck shipments from reactors and storage sites in the Southeast to Nevada. Anyone familiar with the interstate highway system in the Southeast might suspect that key transportation hub cities such as Atlanta and Nashville would be heavily impacted, but the DEIS provides no information about potential impacts on these and other cities.

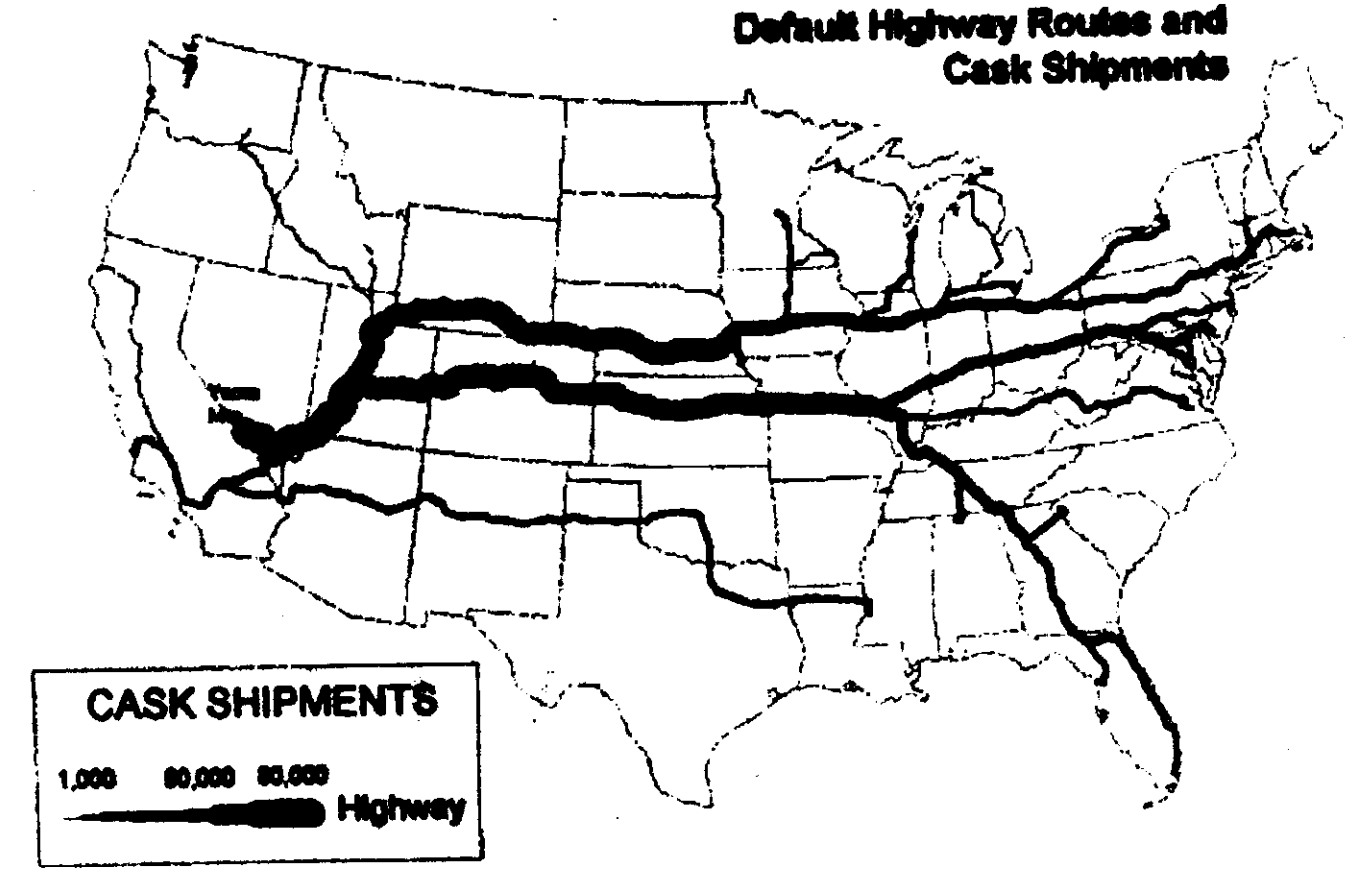
Using the shipment numbers in the DEIS and routing studies prepared by PIC and the University of Nevada - Las Vegas Transportation Research Center, the State of Nevada has developed a preliminary estimate of potential legal-weight truck shipments through Georgia and Tennessee to Nevada. Attachment #3 shows potential truck shipments of SNF and HLW through Atlanta. Under the mostly truck scenario, there would 11,908 shipments through Atlanta over 24 years (the proposed action) and as many 14,826 shipments over 39 years. Put another way, there

5 cont. would be an average of at least one truck shipment per day on I-285 around Atlanta every day, seven days a week, for at least 24 years and for as many as 39 years.

Attachment #4 shows potential truck shipments of SNF and HLW through Nashville. Under the mostly truck scenario, there would be 16,767 shipments through Nashville over 24 years (the proposed action) and as many 24,374 shipments over 39 years. That would mean an average of almost two truck shipments per day through Nashville on I-40 or I-24, every day, seven days a week, for at least 24 years and for as many as 39 years. This potential level of truck traffic through major urban areas certainly constitutes a significant impact which should be identified and evaluated in the DEIS.

The State of Nevada will be submitting extensive written comments on this Draft Environmental Impact Statement for a high-level nuclear waste repository at Yucca Mountain. It is our hope that these comments and those of all others will be seriously considered, and that a reasonable No Action alternative (as opposed to the unreasonable and unrealistic ones contained in the draft document) is selected as the preferred action in the Final Environmental Impact Statement.

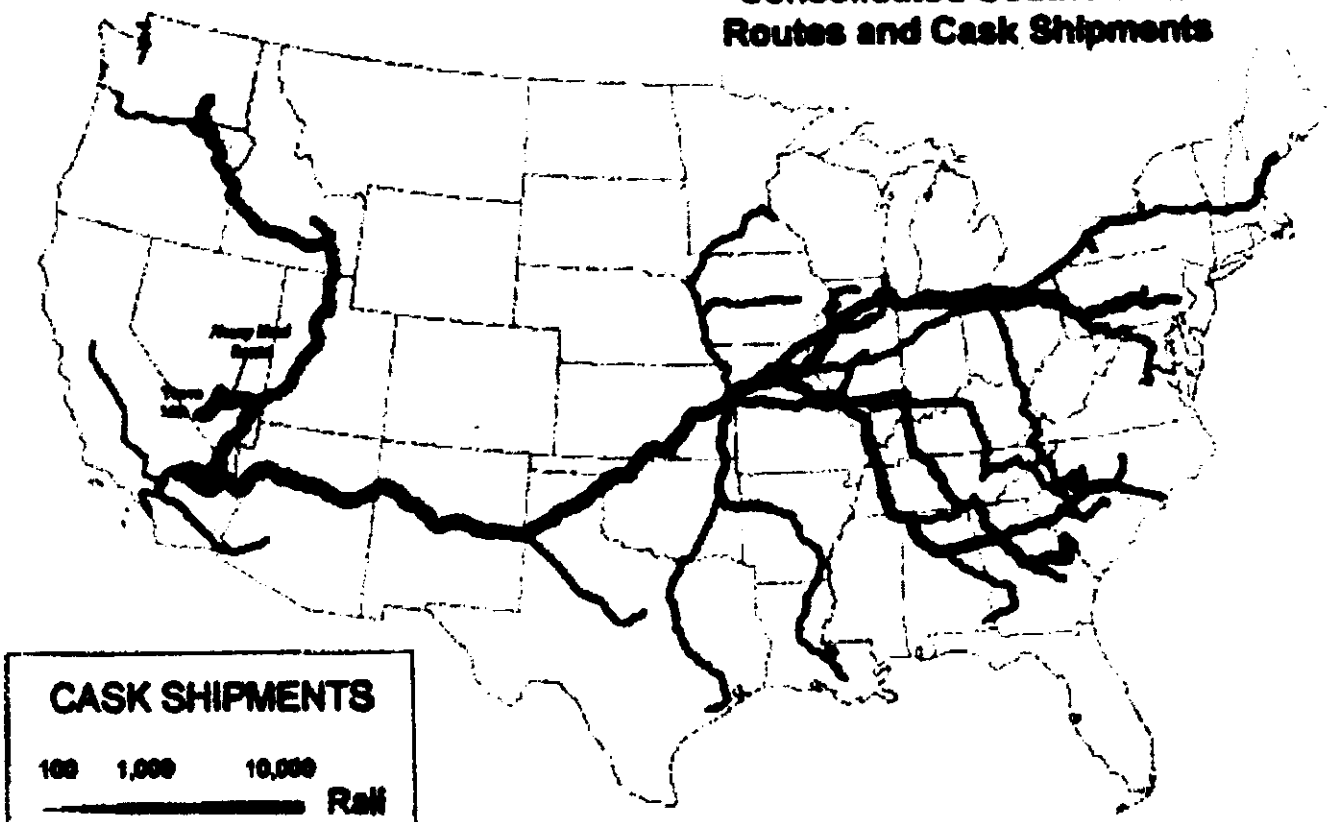




ATTACHMENT #1

PLANNING INFORMATION CORPORATION

Consolidated Southern Rail Routes and Cask Shipments

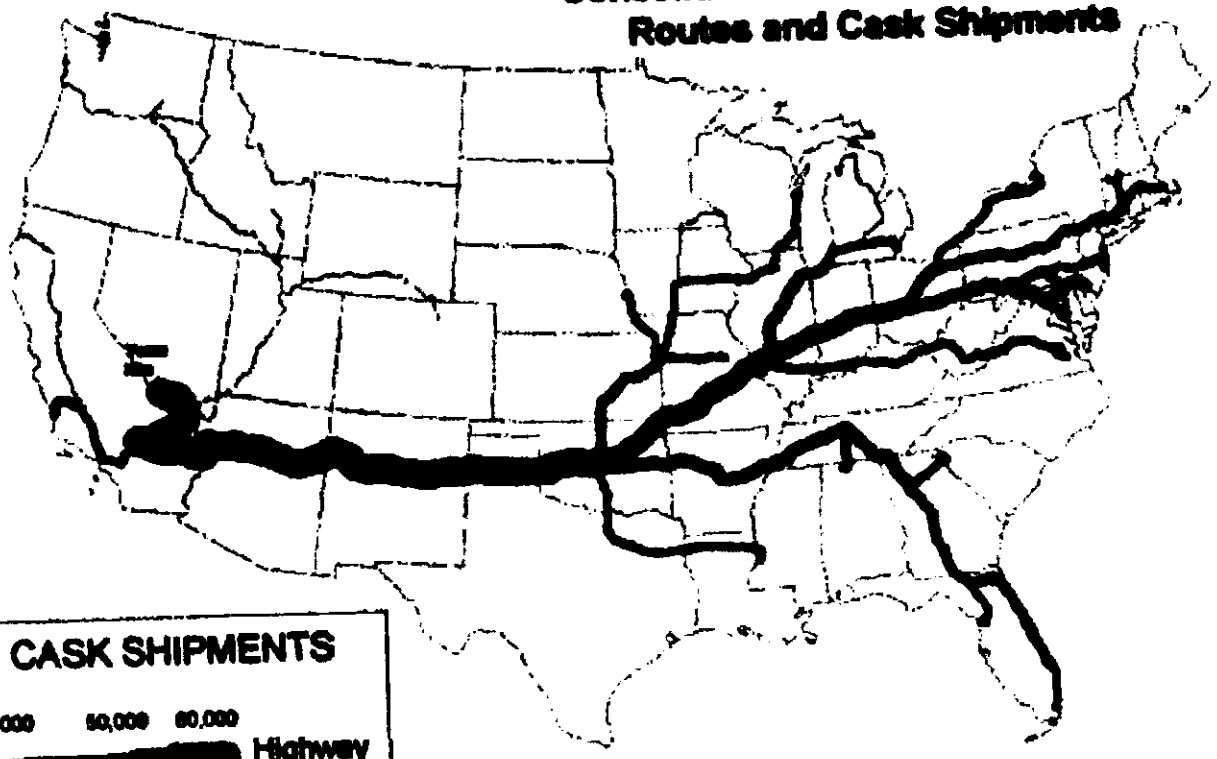


CASK SHIPMENTS

100 1,000 10,000

Rail

Consolidated Southern Highway Routes and Cask Shipments



CASK SHIPMENTS

1,000 50,000 60,000

Highway

ATTACHMENT #2

PLANNING INFORMATION CORPORATION

Attachment # 3

SNF AND HLW TRUCK SHIPMENTS TO YUCCA MOUNTAIN THROUGH ATLANTA

NATIONAL MOSTLY LEGAL-WEIGHT TRUCK SCENARIO

Reactor/Storage Site (State)	Shipments Under Proposed Action (2010-2033)	Shipments Under Modules 1 or 2 (2010-2048)	Most Likely Routes Through Atlanta Area
Crystal River (FL)	283	442	From GA Stateline: I-75, I-475, I-75, I-285, I-75
St. Lucie (FL)	681	1,086	From GA Stateline: I-75, I-475, I-75, I-285, I-75
Turkey Point (FL)	582	871	From GA Stateline: I-75, I-475, I-75, I-285, I-75
Hatch (GA)	871	1,334	From Macon: I-75, I-285, I-75
Vogtle (GA)	593	1,462	From Lamkin: I-20, I-285, I-75
Oconee (SC)	1,007	1,500	From GA Stateline: I-85, I-285, I-75
DOE Savannah River-SNF(SC)	1,316	1,411	From GA Stateline: I-20, I-285, I-75
DOE Savannah River-HLW(SC)	6,055	6,200	From GA Stateline: I-20, I-285, I-75
DOE Savannah River-MSC(SC)	520	520	From GA Stateline: I-20, I-285, I-75
Total	11,908	14,826	
Average Shipments Per Year	496	380	
Average Shipments Per Day	1.4	1	

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Attachment #4

SNF AND HLW TRUCK SHIPMENTS TO YUCCA MOUNTAIN THROUGH NASHVILLE			
NATIONAL MOSTLY LEGAL-WEIGHT TRUCK SCENARIO			
Reactor/Storage Site (State)	**Shipments Under Proposed Action (2010-2033)**	**Shipments Under Modules 1 or 2 (2010-2048)**	**Most Likely Routes Through Nashville Area**
Browns Ferry (AL)	1,175	2,067	From TN Stateline: I-65, I-40, I-24
Crystal River (FL)	283	442	From TN Stateline: I-75, I-24
St. Lucie (FL)	681	1,086	From TN Stateline: I-75, I-24
Turkey Point (FL)	582	871	From TN Stateline: I-75, I-24
Hatch (GA)	871	1,334	From TN Stateline: I-75, I-24
Vogtle (GA)	593	1,462	From TN Stateline: I-75, I-24
Brunswick (NC)	540	903	From TN Stateline: I-40, I-24
McGuire (NC)	450	1,464	From TN Stateline: I-40, I-24
Shearon Harris (NC)	823	921	From TN Stateline: I-40, I-24
Catawba (SC)	643	1,330	From TN Stateline: I-40, I-640, I-40, I-24
Oconee (SC)	1,007	1,500	From TN Stateline: I-75, I-24
Robinson (SC)	231	306	From TN Stateline: I-40, I-640, I-40, I-24
Summer (SC)	291	538	From TN Stateline: I-40, I-640, I-40, I-24
Savannah River Plant - SNF(SC)	1,316	1,411	From TN Stateline: I-75, I-24
Savannah River Plant - HLW(SC)	6,055	6,200	From TN Stateline: I-75, I-24
Savannah River Plant - MISC(SC)	520	520	From TN Stateline: I-75, I-24
Sequoyah (TN)	560	1,179	From Chattanooga: I-24
Watts Bar (TN)	146	840	From Sweetwater: I-75, I-40, I-24
Total	16,767	24,374	
Average Shipments Per Year	699	625	
Average Shipments Per Day	1.9	1.7	